

RHODODENDRON MACROPHYLLUM D. DON EX G. DON

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THERE IS BUT ONE SPECIES of *Rhododendron* with persistent or ever-green leaves that is native to the west coast of North America. A measure of confusion arising from a number of causes has prevented unanimous agreement as to the correct name of this species. In an effort to clarify matters The Tacoma (Wash.) Rhododendron Society, Inc., carried out a research project bearing on this problem. Results of this research were published by the Society in *Rhododendrons* 4 (9): 2-4. 1954. The present note is an attempt to bring this study to the attention of a wider public.

A complete synonymy of the species is to be found in "Bibliography of Cultivated Trees and Shrubs," by Alfred Rehder, p. 505, published by the Arnold Arboretum of Harvard University, 1949. With an understanding in mind that the International Code of Nomenclature assigns validity to the name used in the first published description without exception, it seems a very simple matter to observe that *Rhododendron macrophyllum* D. Don (1834) has precedence over *Rhododendron californicum* Hooker (1855). In fact it is a simple matter if one looks no further than Rehder's synonymy. The later epithet is in error, but circumstances in England surrounding the two published descriptions prove to be interesting indications of the reasons why the mistake was made.

David Don wrote the first description, using herbarium material. His younger brother, G. Don, published it in his "General System of Gardening and Botany" 3: 843. 1834. The description follows:

"*R. macrophyllum* (D. Don, mss. in herb. Lamb.) leaves lanceolate, acute, glabrous on both surfaces as well as peduncles, rounded at base; ovary bristly. Native of N. W. coast of America, where it was collected by Menzies. Petioles an inch long. Flowers copious, smaller than those of *R. maximum*, white. Calycine lobes short, rounded. Filaments glabrous. Long-leaved rhododendron. Shrub."

As will be noted, Don's description is rather incomplete and sketchy, and he considered the flowers to be white. Menzies makes no mention in his "Journal of Vancouver's Voyage" of having seen a white-flowered *Rhododendron*, and live material which he brought back to England proved to be pink-flowered. The designated color of the flowers in the description should have caused no confusion, but evidently it did. Dr. J. MacQueen Cowan of Scotland, who does the revision of *Rhododendron* classification for the Royal Horticultural Society, London, states that the color of the flowers of a *Rhododendron* species has no bearing on the validity of a first published description.

Don was evidently mistaken in stating that the filaments were glabrous. Field observations made in 1954 revealed that the filaments were pubescent

on the lower third in both the white-flowered and the pink-flowered forms.

Sir William Jackson Hooker did most of the work of describing and naming the plants which Menzies brought back from the northwest coast of North America, and his relation to the collection was semi-official. His description of the rhododendron was much more detailed than Don's. He worked from live material growing at Kew. Hooker published his description in the "Botanical Magazine," which has always had a place of great influence in British horticulture, and it was accompanied by a color drawing. These factors combined to give a very important place to Hooker's description when it was published in *Botanical Magazine* 81: *pl.* 4863. 1855. Hooker's description follows:

"*R. californicum*. Apparently a small or moderately sized shrub, with the habit of small plants of *Rhododendron maximum*, or still more of *Rhododendron catawbiense*, having stout branches, of which the younger ones are green and subherbaceous. Leaves on short petioles, three to four inches long, elliptical, obovate, acute, often almost mucronate at the point, tapering at the base, except in the upper leaves, glabrous and naked on both sides, paler colored on the under side. Beneath the flowers the leaves are generally more crowded, so as to form a sort of involucre to the large umbellate head. Calyx small, five lobed; the lobes form a broad base, almost subulate, slightly hairy. Corolla in bud rich carmine, when fully expanded broad campanulate; tube short suddenly spreading into five, broad, oval, crisped lobes; the ground color is then pale pink, deeper toward the apex of the lobes, and streaked with darker rose; thickened and downy below. Anthers deep pink. Ovary elliptical, with five longitudinal furrows, clothed with long, appressed silky hairs, five celled. Style rather larger than the stamens, glabrous. Stigma with five very minute points."

Hooker ignored Don's earlier description and his epithet was used in "Species of *Rhododendron*," published by the former British *Rhododendron* Association, and it has also appeared in successive editions of the "*Rhododendron Handbook*," now published by the Royal Horticultural Society. *Rhododendron* workers generally, including those of America, have followed these publications in the use of Hooker's epithet. The editor of Menzies' "*Journal of Vancouver's Voyage*," Dr. C. F. Newcombe, used *Rhododendron californicum*, marginal note, p. 20, the Preface XVIII, and also in the Appendix. The Washington state law designating this species as the State Flower makes the same error.

For some time, however, nearly all American scientists and botanists, and all herbaria, have correctly used *Rhododendron macrophyllum*. This is due in part to the influence of the published works of the late Alfred Rehder of the Arnold Arboretum.

All of the facts as stated above were presented to Dr. J. MacQueen Cowan and an appeal was made to him for a decision as to the correct epithet. He is positive that Don's *Rhododendron macrophyllum* has valid precedence, and that the use of *Rhododendron californicum* is in error. The Editors of the Royal Horticultural Society's publications in London have agreed to accept Don's epithet for use in future publications.

In the London publication, "Species of *Rhododendron*," p. 583, the statement is made: "*R. macrophyllum* is generally regarded as a form of this species with white and smaller flowers." Don stated in his description that the flowers were smaller than those of *R. maximum*. It is a mistake to infer that there is a difference in the size of the flowers of the two color forms. This same publication states: "HABITAT: California. On mountains at 1500 ft. altitude." This is an incomplete statement of the distribution of the species. The population in either Washington or Oregon is heavier than that of California. The species is known from southern British Columbia to Santa Cruz County, California. Populations in the coastal areas are exceedingly numerous.

While searching for exceptional forms of *Rhododendron occidentale* in Curry County, Oregon, in May 1954, field workers of the Tacoma (Wash.) *Rhododendron* Society, Inc., came upon a colony of seven plants of the extremely rare white-flowered form of this species (*R. macrophyllum*). The flowers were photographed and herbarium and propagating material was collected. An eighth member of the colony had been dislodged and left exposed to die by a logging bulldozer. Wood from the trunk of this plant was taken for an annular ring count. The diameter of the trunk was 3", and the age was 30 years. Details of this form are given below:

***Rhododendron macrophyllum* D. Don ex G. Don, f. *album* Rehder in Jour. Arnold Arb. 28: 254. 1947.**

HABIT: tall, growing to 30 ft., open, tree-like shrub sparsely branched.

LEAVES: elliptic to 18 cm. long, 7.5 cm. wide, cuneate at base, acute or mucronate at apex, glabrous on both surfaces, color lighter below.

INFLORESCENCE: 15 to 25 flowers, rachis ca. 1.5 cm. long.

COROLLA: pure white with dots on upper lobe, Sap Green HCC 62/1, clear color with no brown area as in type, 5 lobed, 5-6.5 cm. across, pedicel ca. 3.5 cm. long.

STAMENS: 10, 2-2.5 cm. long, pubescent below.

PISTIL: 3.75 cm. long, glabrous, ovary densely tomentose.

LOCALITY: northeast of Sixes, Curry County, Oregon, USA, on an abandoned logging road 600 ft. up the southwest slope of Sugarloaf Mountain.

COLLECTOR: *Leonard F. Frisbie* (Tacoma 1003), May 28, 1954.

NOTE: This specimen comparable with the typical species growing in the same locality except in color of flowers.